CTCGTGCCGAATTCGGCACGAGACCGCGTGTTCGCGCCTGGTAGAGATTTCTCGAAGACACCAGTGGGCCC GTGTGGAACCAAACCTGCGCGCGTGGCCGGGCCGTGGGACAACGAGGCCGCGGAGACGAAGGCGCAATGGC GAGGAAGTTATCTGTAATCTTGATCCTGACCTTTGCCCTCTCTGTCACAAATCCCCTTCATGAACTAAAAG CAGCTGCTTTCCCCCAGACCACTGAGAAAATTAGTCCGAATTGGGAATCTGGCATTAATGTTGACTTGGCA ATTTCCACACGGCAATATCATCTACAACAGCTTTTCTACCGCTATGGAGAAAATAATTCTTTGTCAGTTGA AGGGTTCAGAAAATTACTTCAAAATATAGGCATAGATAAGATTAAAAGAATCCATATACACCATGACCACG ACCATCACTCAGACCACGAGCATCACTCAGACCATGAGCGTCACTCAGACCATGAGCATCACTCAGACCAC GAGCATCACTCTGACCX: GATCATCACCTCTCACCATAATCATGCTGCTTCTGGTAAAAATAAGCGAAAAGC TCTTTGCCC STACCATGACTCAGATAGTTCAGGTAAAGATCCTAGAAACAGCCAGGGGAAAGGAGCTCACC GACCAGAACATGCCAGTGGTAGAAGGAATGTCAAGGACAGTGTTAGTGCTAGTGAAGTGACCTCAACTGTG TACAACACTGTCTCTGAAGGAACTCACTTTCTAGAGACAATAGAGACTCCAAGACCTGGAAAACTCTTCCC AAACAAATGAATCTGTGAGTGAGCCCCGAAAAGGCTTTATGTATTCCAGAAACACAAATGAAAATCCTCAG GAGTGTTTCAATGCATCAAAGCTACTGACATCTCATGGCATGGGCATCCAGGTTCCGCTGAATGCAACAGA GTTCAACTATCTCTGTCCAGCCATCATCAACCAAATTGATGCTAGATCTTGTCTGATTCATACAAGTGAAA AGAAGGCTGAAATCCCTCCAAAGACCTATTCATTACAAATAGCCTGGGTTGGTGGTTTTATAGCCATTTCC ATCATCAGTTTCCTGTCTCTGCTGGGGGTTATCTTAGTGCCTCTCATGAATCGGGTGTTTTTCAAATTTCT CCTGAGTTTCCTTGTGGCACTGGCCGTTGGGACTTTGAGTGGTGATGCTTTTTTACACCTTCTTCCACATT CTCATGCAAGTCACCACCATAGTCATAGCCATGAAGAACCAGCAATGGAAATGAAAAGAGGACCACTTTTC AGTCATCTGTCTTCTCAAAACATAGAAGAAAGTGCCTATTTTGATTCCACGTGGAAGGGTCTAACAGCTCT AGGAGGCCTGTATTTCATGTTTCTTGTTGAACATGTCCTCACATTGATCAAACAATTTAAAGATAAGAAGA AAAAGAATCAGAAGAAACCTGAAAATGATGATGATGTGGAGATTAAGAAGCAGTTGTCCAAGTATGAATCT CAACTTTCAACAAATGAGGAGAAAGTAGATACAGATGATCGAACTGAAGGCTATTTACGAGCAGACTCACA AGAGCCCTCCCACTTTGATTCTCAGCAGCCTGCAGTCTTGGAAGAAGAAGAGGTCATGATAGCTCATGCTC ATCCACAGGAAGTCTACAATGAATATGTACCCAGAGGGTGCAAGAATAAATGCCATTCACATTTCCACGAT ACACTCGGCCAGTCAGACGATCTCATTCACCACCATCATGACTACCATCATATTCTCCATCATCACCACCA CCAAAACCACCATCCTCACAGTCACAGCCAGCGCTACTCTCGGGAGGAGCTGAAAGATGCCGGCGTCGCCA CTTTGGCCTGGATGGTGATAATGGGTGATGGCCTGCACAATTTCAGCGATGGCCTAGCAATTGGTGCTGCT TTTACTGAAGGCTTATCAAGTGGTTTAAGTACTTCTGTTGCTGTGTTCTGTCATGAGTTGCCTCATGAATT AGGTGACTTTGCTGTTCTACTAAAGGCTGGCATGACCGTTAAGCAGGCTGTCCTTTATAATGCATTGTCAG CCATGCTGGCGTATCTTGGAATGGCAACAGGAATTTTCATTGGTCATTATGCTGAAAATGTTTCTATGTGG ATATTTGCACTTACTGCTGGCTTATTCATGTATGTTGCTCTGGTTGATATGGTACCTGAAATGCTGCACAA TGATGCTAGTGACCATGG<u>ATGTAGCCGCTGGGGGTATTTCTTTT</u>ACAGAATGCTGGGATGCTTTTGGGTT TTGGAATTATGTTACTTATTTCCATATTTGAACATAAAATCGTGTTTCGTATAAATTTCTAGTTAAGGTTT AAATGCTAGAGTAGCTTAAAAAGTTGTCATAGTTTCAGTAGGTCATAGGGAGATGAGTTTGTATGCTGTAC AAAGGTACGTTTTAATATTTAAGTTATTCTATCTTGGAGATAAAATCTGTATGTGCAATTCACCGGTATTA CCAGTTTATTATGTAAACAAGAGATTTGGCATGACATGTTCTGTATGTTTCAGGGAAAAATGTCTTTAATG CTTTTTCAAGAACTAACACAGTTATTCCTATACTGGATTTTAGGTCTCTGAAGAACTGCTGGTGTTTAGGA ATAAGAATGTGCATGAAGCCTAAAATACCAAGAAAGCTTATACTGAATTTAAGCAAAGAAATAAAGGAGAA AAGAGAAGAATCTGAGAATTGGGGGAGGCATAGATTCTTATAAAAATCACAAAATTTGTTGTAAATTAGAGG ATTATTTCCCGTAAAAACGTAGTGAGCACTCTCATATACTAATTAGTGTACATTTAACTTTGTATAATACA GAAATCTAAATATATTTAATGAATTCAAGCAATATACACTTGACCAAGAAATTGGAATTTCAAAATGTTCG TGCGGGTTATATACCAGATGAGTACAGTGAGTAGTTTATGTATCACCAGACTGGGTTATTGCCAAGTTATA TATCACCAAAAGCTGTATGACTGGATGTTCTGGTTACCTGGTTTACAAAATTATCAGAGTAGTAAAACTTT GATATATATGAGGATATTAAAACTACACTAAGTATCATTTGATTCGATTCAGAAAGTACTTTGATATCTCT CAGTGCTTCAGTGCTATCATTGTGAGCAATTGTCTTTATATACGGTACTGTAGCCATACTAGGCCTGTCTG TGGCATTCTCTAGATGTTTCTTTTTTACACAATAAATTCCTTATATCAGCTTG

FIGURE 1

 $\underline{\mathtt{ATG}}\mathsf{GCGAGGAAGTTATCTGTAATCTTGATCCTGACCTTTGCCCTTCTGTCACAAATCCCCTTCATGAACT$ AAAAGCAGCTGCTTTCCCCCAGACCACTGAGAAAATTAGTCCGAATTGGGAATCTGGCATTAATGTTGACT TGGCAATTTCCACACGGCAATATCATCTACAACAGCTTTTCTACCGCTATGGAGAAAATAATTCTTTGTCA GTTGAAGGGTTCAGAAAATTACTTCAAAATATAGGCATAGATAAGATTAAAAGAATCCATATACACCATGA ACCACGAGCATCACTCTGACCATGATCATCACCATAATCATGCTGCTTCTGGTAAAAATAAGCGA AAAGCTCTTTGCCCAGACCATGACTCAGATAGTTCAGGTAAAGATCCTAGAAACAGCCAGGGGAAAGGAGC TCACCGACCAGAACATGCCAGTGGTAGAAGGAATGTCAAGGACAGTGTTAGTGCTAGTGAAGTGACCTCAA CTGTGTACAACACTGTCTCTGAAGGAACTCACTTTCTAGAGACAATAGAGACTCCAAGACCTGGAAAACTC TAGGAAAACAAATGAATCTGTGAGTGAGCCCCGAAAAGGCTTTATGTATTCCAGAAACACAAATGAAAATC CTCAGGAGTGTTTCAATGCATCAAAGCTACTGACATCTCATGGCATGGGCATCCAGGTTCCGCTGAATGCA ACAGAGTTCAACTATCTCTGTCCAGCCATCATCAACCAAATTGATGCTAGATCTTGTCTGATTCATACAAG TGAAAAGAAGGCTGAAATCCCTCCAAAGACCTATTCATTACAAATAGCCTGGGTTGGTGGTTTTATAGCCA $\tt TTTCCATCATCAGTTTCCTGTCTCTGGGGGGTTATCTTAGTGCCTCTCATGAATCGGGTGTTTTTCAAA$ TTTCTCCTGAGTTTCCTTGTGGCACTGGCCGTTGGGACTTTGAGTGGTGATGCTTTTTTACACCTTCTTCC ACATTCTCATGCAAGTCACCACCATAGTCATAGCCATGAAGAACCAGCAATGGAAATGAAAAGAGGACCAC TTTTCAGTCATCTGTCTTCTCAAAACATAGAAGAAAGTGCCTATTTTGATTCCACGTGGAAGGGTCTAACA GCTCTAGGAGGCCTGTATTTCATGTTTCTTGTTGAACATGTCCTCACATTGATCAAACAATTTAAAGATAA GAAGAAAAAGAATCAGAAGAAACCTGAAAATGATGATGATGTGGAGATTAAGAAGCAGTTGTCCAAGTATG AATCTCAACTTTCAACAAATGAGGAGAAAGTAGATACAGATGATCGAACTGAAGGCTATTTACGAGCAGAC TCACAAGAGCCCTCCCACTTTGATTCTCAGCAGCCTGCAGTCTTGGAAGAAGAAGAGGTCATGATAGCTCA TGCTCATCCACAGGAAGTCTACAATGAATATGTACCCAGAGGGTGCAAGAATAAATGCCATTCACATTTCC ACGATACACTCGGCCAGTCAGACGATCTCATTCACCACCATCATGACTACCATCATATTCTCCATCATCAC CACCACCAAAACCACCATCCTCACAGTCACAGCCAGCGCTACTCTCGGGAGGAGCTGAAAGATGCCGGCGT CGCCACTTTGGCCTGGATGGTGATAATGGGTGATGGCCTGCACAATTTCAGCGATGGCCTAGCAATTGGTG $\tt CTGCTTTTACTGAAGGCTTATCAAGTGGTTTAAGTACTTCTGTTGTTGTTGTCATGAGTTGCCTCAT$ GAATTAGGTGACTTTGCTGTTCTACTAAAGGCTGGCATGACCGTTAAGCAGGCTGTCCTTTATAATGCATT GTCAGCCATGCTGGCGTATCTTGGAATGGCAACAGGAATTTTCATTGGTCATTATGCTGAAAATGTTTCTA ${\tt CACAATGATGCTAGTGACCATGGATGTAGCCGCTGGGGGTATTTCTTTTACAGAATGCTGGGATGCTTTT}$ GGGTTTTGGAATTATGTTACTTA<mark>TTTCCATATTTGAACATAAAATCGTGT</mark>TTCGTATAAATTTCTAG

FIGURE 2

MARKLSVILILTFALSVTNPLHELKAAAFPQTTEKISPNWESGINVDLAISTRQYHLQQLFYRYGENNSLS
VEGFRKLLQNIGIDKIKRIHIHHDHDHHSDHEHHSHLETIETPRPGKL
FPKDVSSSTPPSVTSKSRVSRLAGRKTNESVSEPRKGFMYSRNTNENPQECFNASKLLTSHGMGIQVPLNA
TEFNYLCPAIINQIDARSCLIHTSEKKAEIPPKTYSLQIAWVGGFTANSTASFUSTUSVITVPLMNRAFIK
TISPNYLCPAIINQIDARSCLIHTSEKKAEIPPKTYSLQIAWVGGFTANSTASFUSTUSVITVPLMNRAFIK
TISPNYLCPAIINQIDARSCLIHTSEKKAEIPPKTYSLQIAWVGGFTANSTASFUSTUSVITVPLMNRAFIK
TEFNYLCPAIINQIDARSCLIHTSEKKAEIPPKTYSLQIAWVGGFTANSTASFUSTUSVITVPLMNRAFIK
TEFNYLCPAIINQIDARSCLIHTSEKKAEIPPKTYSLQIAWVGGFTANSTASFUSTUSVITVPLMNRAFIK
LSGDAFLHLLPHSHASHHHSHSHEEPAMEMKRGPLFSHLSSQNIEESAYFDSTWKGLT
NACHAMAN TANAN T

FIGURE 3

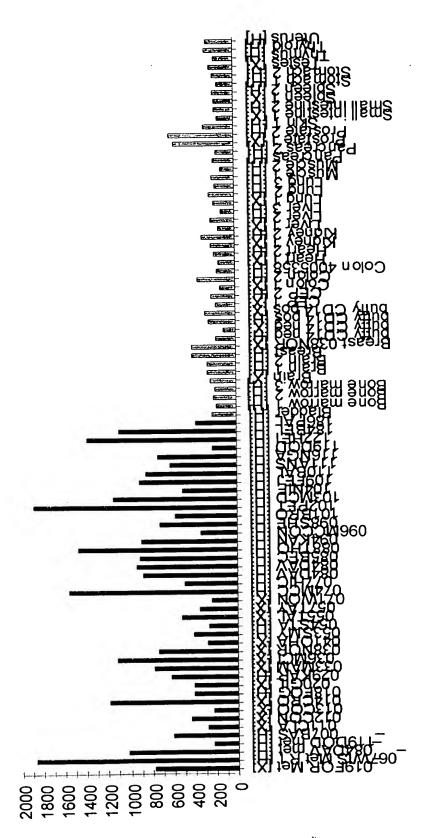


FIGURE 4